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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,692	07/28/2003	Mitsuru Yoneyama	2003_0891A	3210

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EXAMINER

WALBERG, TERESA J

ART UNIT PAPER NUMBER

3742

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,692

Applicant(s)

YONEYAMA ET AL.

Examiner

Teresa J. Walberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The disclosure is objected to because of the following informalities: paragraphs 0071 to 0077 use different reference numbers than the Figures they discuss.

Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 15, 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Liviken et al (WO 94/09684).

Liviken et al disclose a heated seat assembly (see Fig. 7) comprising: a seat surface material (7); a heating element (2) fixed inside said seat surface material (7), said heating element (2) comprising: a base material (3 or 4) made of a hot melt material (see page 4, lines 14-18); and a linear heater (2) disposed on said base material (3 or 4); and a resin (9) filled inside of said seat surface material (7) and covering said heating element (2) .

With respect to claim 2, the linear heater (2) is fixed onto said base material (3 or 4) by adhesion.

With respect to claim 3, the base material is in a form of a sheet (4 in Fig. 1) or a mesh structure (8 in Fig. 3).

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With respect to claim 4, the base material is made of a fibrous material (8 in Fig. 3).

With respect to claim 6, the linear heater (2) has a hot melt layer (4) formed around an outer periphery of a heating element (see Fig. 1).

With respect to claim 15, Liviken et al disclose a method of manufacturing a heated seat assembly (see Fig. 7), comprising the steps of: preparing a heating element (2) and a seat surface material (7), said heating element comprising a base material of mesh structure (8 in Fig. 3) and a linear heater (2); fixing said heating element (2) onto said seat surface material (7) (see Fig. 7); and integrating said seat surface material (7), said heating element (2), and filling resin (9). Note that the claim does not require that the filling resin be integrated while in liquid form.

With respect to 16, the heating element (2) and said seat surface material (7) are fixed by adhesion or hot melt bonding. See page 7, lines 9-18.

With respect to claims 18 and 19, the thermoplastic layers of Liviken et al are disclosed as being made of materials that would inherently melt at a molding temperature of the filling resin.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liviken et al in view of Gessler et al (2004/0074589).

Liviken et al disclose the claimed structure and method with the exception of the heater being secured by sewing and the sewing being done with a hot melt material.

Gessler et al disclose securing a fiber to a substrate by sewing with hot melt material.

It would have been obvious in view of Gessler et al to use sewing with hot melt material to secure the heater of Liviken et al, the motivation being to better secure the heater in place.

6. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liviken et al in view of Kayama (JP 03-015412).

Liviken et al disclose the claimed method with the exception of the foam being urethane resin or being formed by foaming injection molding.

Kayama discloses the foam being urethane resin and being formed by foaming injection molding (see abstract).

It would have been obvious in view of Kayama to use a urethane resin foam and to form the foam by injection molding in the heated seat of Liviken et al, the motivation being to make the car seat comfortable to sit on.

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7. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liviken et al in view of Rowland (2,732,479).

Liviken et al disclose the claimed structure with the exception of the heater having a braided structure with a plurality of conductors and threads and the number of threads being not less than the number of conductors.

Rowland discloses heater having a braided structure with a plurality of conductors and threads and the number of threads being not less than the number of conductors. See Fig. 4 and col. 1, lines 53-61.

It would have been obvious in view of Rowland to use a heater having a braided structure with a plurality of conductors and threads and the number of threads being not less than the number of conductors as the heater of Liviken et al, the motivation being to make the heater more flexible and less likely to break.

With respect to claim 10, Liviken et al disclose the conductor having an insulating coating layer. See page 3, line 34.

8. Claims 11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liviken et al in view of Rowland as applied to claims 7-10 above, and further in view of Peeri (4,063,069).

Liviken et al disclose the claimed structure with the exception of the insulating coating layer being a lubricant, the thread being lubricant, and thread comprising one of fibers coated with highly lubricant material and highly lubricant fibers.

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Peeri discloses a heating element having coating layers of polytetrafluoroethylene, which is considered to be a lubricant.

It would have been obvious in view of Peeri to use lubricant coatings in the heater of Liviken et al, the motivation being to make the heater stronger and less likely to be damaged.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liviken et al in view of Rowland as applied to claims 7-10 above, and further in view of Moss (6,311,637).

Liviken et al disclose the claimed structure with the exception of the insulating coating layer being colored for indication.

Moss discloses that it is conventional in the art for an insulating coating layer to be colored for indication. See col. 4, lines 5-17.

It would have been obvious in view of Moss to use color coded insulation layers in the heater of Liviken et al, the motivation being to make the heater easier to replace when needed.

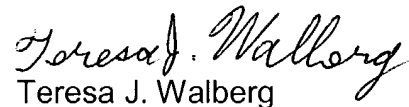
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wales is cited to show a sewn heating element. Theodore is cited to show a fused heating element. Weckstein is cited to show a heating braid. Kuhn and Check et al are cited to show car seat heaters.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 703-308-1327. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Teresa J. Walberg
Primary Examiner
Art Unit 3742

tjw